

CLAIMS

1. A Fresnel lens sheet having a Fresnel lens element group, each Fresnel lens element being composed of a Fresnel lens surface and a non-lens surface on a surface thereof, characterized in that a surface roughness of at least one of the Fresnel lens surface of the Fresnel lens element group, the non-lens surface of the Fresnel lens element group, and a sheet surface, on which no Fresnel lens element group is formed, of the Fresnel lens sheet is made rougher from the central portion of the Fresnel lens sheet outwardly.
2. A Fresnel lens sheet according to claim 1, characterized in that when a distance from the central portion of the Fresnel lens sheet is shown by  $x(\text{mm})$ , an amount of change  $(dRa(x)/dx)$  of the surface roughness  $Ra (x) (\mu\text{m})$  of at least one of the Fresnel lens surface of the Fresnel lens element group, the non-lens surface of the Fresnel lens element group, and the sheet surface on which no Fresnel lens element group is formed is preferably  $0 < dRa(x)/dx < 1.0$ .
3. A Fresnel lens sheet according to claim 1 or 2, characterized in that the difference ( $\Delta Ra$ ) between the surface roughness of the central portion of the Fresnel lens sheet and the surface roughness of the outer peripheral portion of the Fresnel lens sheet is  $0.1 \mu\text{m}$  or more to  $5.0 \mu\text{m}$  or less.
4. A Fresnel lens sheet according to any one of claims 1 to 3, characterized in that the surface roughness is made rougher continuously or stepwise from the central portion of the Fresnel lens sheet outwardly in a radial direction.
5. A Fresnel lens sheet according to any one of claims 1 to 3, characterized in that the surface roughness is made rougher continuously or stepwise from the central portion of the Fresnel lens sheet outwardly in a vertical direction.
6. A Fresnel lens sheet according to any one of claims 1 to 3, characterized in that the surface roughness is made rougher continuously or stepwise from the central portion of the Fresnel lens sheet outwardly in a horizontal direction.
7. A Fresnel lens sheet according to any one of claims 1 to 6,

characterized in that a lens shape for diffusing incident light in a vertical direction is formed on the sheet surface on which no Fresnel lens element group is formed.

8. A rear projection type screen characterized by comprising: a Fresnel lens sheet according to any one of claims 1 to 7; and a lenticular lens sheet for diffusing light having passed through the Fresnel lens sheet.